

CHAPTER 8690 - SUPPLEMENTAL DETECTION

(1987)

AIRCRAFT DETECTION

8691

(1987)

Aircraft observers are used for detection purposes for areas without fixed lookout coverage or as a supplement to fixed lookouts during periods of high fire danger, poor visibility, or lightning.

ADVANTAGES

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There are many advantages to aircraft detection. First, the observer can change his perspective easily. By changing position, the observer can get close to a smoke once it's detected. Aircraft observers can search over extremely large areas in a relatively short period. Sometimes they can detect smokes when the fire is very small if they are in the area at the time of ignition.

They may even help to determine fire cause by noticing who and what is present at the fire scene prior to the arrival of ground units.

Once the fire has been detected, the aircraft can remain very close, and the observer can help ground units with location, access, and water sources. The observer can draw accurate maps and drop them to personnel at the incident or bring them back to the ECC. The observer can also closely monitor any significant changes in the fire.

Another advantage to aircraft observation is that the observer can carry special equipment such as the Forward Looking Infra Red (FLIR) system. This system can accurately pinpoint hot spots on a fire's perimeter. They have also carried cameras as well as video equipment to photograph fires.

With LORAN-C electronic locating equipment, aircraft observers can pinpoint fire locations. When relayed to the ECCs, this information can significantly speed up the determination of correct access.

Aircraft observers must meet the same requirements as the fixed lookout observers, as detailed earlier in this handbook. They must detect, locate and report smoke. They must locate the fire without the benefit of a firefinder and so must have suitable maps and the knowledge to use them. The radio must be capable of frequencies which the ECC can use.

DISADVANTAGES

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A disadvantage to aircraft detection is that the observer only gets a momentary look at the terrain as he passes through. It might be hours before the area gets searched again. If the observer finds a fire and gets involved providing additional services for air or ground resources, detection over the remainder of the area may suffer.

AIRCRAFT RESOURCES

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CDF Air Attack Aircraft

These have a pilot and trained observer with adequate maps and radios.

CDF Helicopters

These also have a pilot and trained observer with maps and radios. Another advantage is that if a crew is on board, they can set down and take suppression action. Helicopters are extremely valuable when used to detect and attack lightning fires.

Industry Cooperative Patrols

There are a variety of patrol types. Most have a trained pilot/observer and radios to contact the ECC.

Hired Aircraft

Fixed and rotary wing call-when-needed aircraft are usually available for hire. A CDF observer with maps can be assigned to help detect and locate fires. Pack set radios are available through the ECC for temporary installation.

Volunteers in Prevention

These are private citizens who have access to aircraft and who volunteer their time to fly detection missions.

These individuals receive training and have access to CDF radio frequencies for communication.

Cooperating Agencies

There are many agencies which use aircraft. Some, like the US Forest Service, are similar in capabilities to CDF aircraft and observers. Others who may not normally be in the fire suppression business may be well intentioned, but may not have the expertise to locate wildland fires and may not have access to CDF communication frequencies.

Private Citizens

These individuals usually have no expertise locating fires in wildland areas nor access to CDF frequencies.

Commercial Aircraft

These aircraft usually fly so high that they only see fires which have already been reported. They have no expertise locating wildland fires and no access to fire frequencies.

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